# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

## **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Factors Associated With Domestic Violence: A Cross-sectional
	Survey Among Women in Jeddah, Saudi Arabia
AUTHORS	Fageeh, Wafa

# **VERSION 1 - REVIEW**

REVIEWER	Jeniimarie Febres, M.A.; Gregory L. Stuart, Ph.D.
	University of Tennessee
	USA
REVIEW RETURNED	11-Nov-2013

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GENERAL COMMENTS	The author presents data on the prevalence and correlates of domestic violence (DV) in a convenience sample of women in Jeddah, Saudi Arabia. As one of the first studies to examine DV in this region of the country, the manuscript has the potential to make a significant contribution to the study of DV. However, the impact of this manuscript could be improved with revisions throughout. Recommendations are provided that should be considered and addressed prior to publication.
	<ul> <li>Introduction</li> <li>The two paragraph introduction serves as a good start to a rationale for this study; however, it is incomplete.</li> <li>1. Although the author makes it clear that there is limited information about DV in developing countries, s/he states that research on DV has in fact been conducted in other regions of Saudi Arabia. A description of the research findings from developing countries similar to Saudi Arabia and, more importantly, regions within Saudi Arabia would provide the additional background information necessary to understand the position of this study relative to existing studies.</li> <li>2. It is also possible that the previous studies conducted in and around Saudi Arabia may hold some clues about the prevalence and correlates examined in this study. It would be helpful if the author described how s/he thought the findings in this study would or would not compare to the existing literature.</li> <li>3. The incidence of DV and whether people self-report DV differs according to a number of factors, including culture (e.g., social norms for conflict tactics, gender roles). In the Discussion section, the author discusses the potential impact of culture as it relates to the findings in this study. It is foreseeable that hypotheses about the prevalence and correlates of DV in this region could be formed based on such cultural knowledge. A discussion about relevant cultural factors would improve the Introduction.</li> <li>4. Accordingly, hypotheses or an explanation as to why no</li> </ul>

- hypotheses were created a priori is needed.
- 5. It is unclear why the author chose the specific factors examined in this study. An explanation for this, including literature supporting the relevance of these factors, should be included in the Introduction.

### Method

- 6. What were the inclusion and exclusion criteria for participation? Were there requirements for cohabitation, relationship status, relationship length, etc.?
- 7. From where in the hospital were the women recruited and where did they complete the questionnaires? Due to the sensitive nature of the information obtained, it is possible that the setting of the study has direct relevance to the number of women who consented and the reliability/validity of their responses.
- 8. Information about the setting is also important to know out of concern for the safety of the women reporting this information and data integrity.
- 9. Were the women separated or in a group when completing their questionnaires?
- 10. Were referrals provided for women to seek additional supportive services if desired?
- 11. A fuller description, including psychometric properties, of the measures used in this study is needed. Without such information the rationale for why they were chosen and the appropriateness of their use cannot be evaluated.

#### Results

- 12. Expatriate women comprised a substantial portion of the sample. Potential cultural differences between these women and native Saudi women could impact their experience of DV, their self-report, amount of education, income, substance use, etc. This could result in differences between the groups, making it inappropriate to combine them without proof that no significant differences exist. More information about the expatriate women's nation(s) of origin is needed, as well as an explanation as to how the author determined it was appropriate to combine them with native Saudi women for the analyses.
- 13. It is unclear why the author chose to report *p*-values for only some of the analyses reported in Table 1. Clarification or a more complete table is needed.
- 14. In Table 1, what is meant by "treated cycles"?

## **Discussion**

- 15. On page 8, the author explains that some women needed assistance in completing their questionnaires. Due to the sensitive nature of the information obtained, the potential impact on the self-report of those women who were helped should be considered in the discussion of study limitations.
- 16. On page 14, the author concludes "Our finding of a positive association between DV and women's education is contrary to those of other authors who reported DV to be more common among women with a lower level of education." According to Table 1, of the levels of education reported, DV was significant for the second lowest level of education reported. This seems consistent with previous research as the author described it. Without more specific information about the specific education level in previous studies to

which the author is comparing, the accuracy of this conclusion cannot be evaluated.  17. The cross-sectional nature of this study should be discussed as a limitation as it prohibits conclusions about causality, predictive ability, and labeling variables as "risk" factors.
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REVIEWER	Maria Arleide da Silva
	Instituto de Medicina Integral Professor Fernando Figueira - Recife/
	Pernambuco/Brazil
REVIEW RETURNED	18-Nov-2013

### **GENERAL COMMENTS**

1-As it is a convenience sample, I suggest the authors inform the quantity of patients/years hospitalized and ambulatory in the place of study and if it is possible, show percentage of patients, care-takers and visitors included in this study, because this information can give a visibility of the size of the sample studied.;

2-Although the authors hadn't calculated the size of the sample, it is important to inform the expectation of the DV or DV estimated to the population in the study.;

3-It is necessary to inform clearly the dependent variable of the study, which question was used. Suffered violence when? Any time in life.? In the last 12 months. When?

1-In methods, the authors presented group of variable investigated which are not presented in the results.(3-help-seeking options of abused women; 4-the damaging effect of violence on the victims and 5-the level of happiness). It is necessary to present result and discussion of these variable.

- 2-Althoug the study is relevant, considering the lack of study in the population of Jedahh, it is necessary to explain the criterion used for age women from 15 to 70 years old. This range is very ample and it included adolescent, adults and elderly. I think it is pertinent to inform de percentage of each group of women;
- 3- Inform the Confidencia Interval (CI) used in the study;
- 4– If it is possible, considering the size of the population included, it would be important to verify IF there was positive association in the 3 groups of women. The violence against elderly has raised, but there aren't many studies about domestic violence against elderly women:
- 5- Considering the value of p,05.. found in many variable, I suggest to perform an analysis of multivariate logistic regression, moldel.

#### **VERSION 1 – AUTHOR RESPONSE**

Reviewer Name Jeniimarie Febres, M.A.; Gregory L. Stuart, Ph.D. Institution and Country University of Tennessee USA

- 1. I appreciate this remark. I have included findings form research on DV conducted in other regions of Saudi Arabia (references 7 and 8).
- 2. I have mentioned in the last paragraph of the introduction that none of the studies conducted in Saudi Arabia had identified the factors associated with DV.
- 3. I agree that the incidence of DV Saudi Arabia is a conservative country that is largely male-dominant. In general, women do not report abuse, as it is a hidden problem. In addition, women fear to report cases of domestic violence for fear of being stigmatized. I have attempted to mention this in the discussion without delving into the much details, as there are no published data regarding the cultural factors that are associated with domestic abuse in Saudi Arabia.
- 4. I did not create any hypothesis for the reasons mentioned above and because this study is the first one to study the factors associated with domestic violence in Saudi Arabia.
- 5. Given that no previous study has assessed the factors associated with domestic violence in Saudi Arabia, we studied factors that were reported to be significantly associated with domestic violence in studies conducted in other countries.
- 6. I included only ever-married women aged 15 to 70 years and excluded single women and those < 15 or > 70 years. There no requirements for cohabitation because in Saudi Arabia, women are only allowed to live with their relatives or spouses. In addition, the only relationship status is the Saudi society that is recognized by law is married, divorced, widowed, or separated. Hence, participants were divided into these groups.
- 8. All the participants were interviewed in private. Personal data were unknown to the attending helper.
- 9. The women were requested to fill the questionnaire in a private room that was reserved for this purpose. I have included this in the methods section.
- 10. As social services is not well developed in Saudi Arabia, we hoped that by publishing this article the attention of policy makers will be caught so that they improve social services.
- 11. I have included how marital satisfaction was classified. I have also mentioned in the methods section that Cronbach's alpha was used to test the internal consistency of items that attempted to measure the women's level of happiness. If Cronbach's alpha was >.70, then the ratio scale was considered reliable.
- 12. Thank you for this comment. Unfortunately, I did not specifically document the nationality of expatriate women, as all women in an ultraconservative country such as Saudi Arabia are under the same threat, The society is mainly dominated by males and there are limited consequences for perpetrators of domestic violence. This allowed me to combine native Saudi and expatriate women.
- 13. I appreciate your comment. In an attempt to avoid repetition, I reported the most important values in the Table 1. For the observations that were not significant, I mentioned this in the text (pages 17 and 19).
- 14. Thank you for this comment. I meant the number of cycles during which treatment was administered to induce ovulation to treat delayed conception. I have rewritten this as clomiphene-treated cycles.
- 15. Thank you for your insight. I have mentioned this as a limitation of this study.
- 16. I am sorry for this oversight. I have modified this statement accordingly. I have also mentioned the specific education level in previous studies to which I compared the authors' findings to mine.
- 17. I appreciate this valuable comment. I have also mentioned this as a limitation of this study.

Reviewer Name Maria Arleide da Silva Institution and Country Instituto de Medicina Integral Professor Fernando Figueira - Recife/

Pernambuco/Brazil

Thank you for this comment. I unfortunately did not collect this information given that patients, care givers, and visitors were included in the study. I also did not specify who was a patient, care giver, or visitor during data collection at the time of data collection.

I have reported the prevalence of DV in the study population. I have also reported the prevalence of the various types of DV.

I have mentioned in the methods the definitions that were used for the purpose of this study. Physical violence, for example, was defined as having ever been pushed, beaten, slapped, kicked, hit with a fist or object, pulled by the hair, dragged, burned, or threatened or attacked with a knife or gun by a spouse or family member. Psychological abuse was defined as having ever been threatened by a spouse or family member, prevented from visiting or calling family members and friends, or insulted. Sexual violence was defined as having ever been forced by a spouse or family member to have unwanted intercourse.

- 1. Thank you for this remark. I agree that I did not present these in the results and discussion because I thought that it would shift the reader from the focus of the paper. However, I have included these and attempted to discuss these items while trying not to deviate from the main purpose of the study.
- 2. Thank you for this comment. I choose to include women aged 15 to 70 for two reasons: (1) marriages before the age of 20 years (in women) are not uncommon in Saudi Arabia, and (2) DV among elderly women is unknown, so it would be informative to know the percentage of women above 50 who suffer DV. I have also mention this in the methods section. I agree with you (and thank you for bringing up this point) that it is pertinent to inform the reader about the percentage of women in each group. I have included this in the manuscript.
- 3. I used 95% CI. I have mentioned this in the methods.
- 4. I appreciate this comment. I have performed further analysis and I did not find any association between these three groups of women. I agree that there are few studies that reported domestic violence against women. However, comparisons were not relevant in our sample population because elderly women constituted a very small proportion of the sample.
- 5. Thank you for this comment. I have performed logistic regression for the variables.

### **VERSION 2 - REVIEW**

REVIEWER	Gregory L. Stuart, Ph.D. & Jeniimarie Febres, M.A.
	University of Tennessee, USA
REVIEW RETURNED	27-Dec-2013

GENERAL COMMENTS	It is clear that the author took the time to consider the previous review and to make some modifications accordingly. This manuscript is much improved. Recommendations that were not addressed and that are still considered important are included below along with extra clarification of their meaning.
	<ol> <li>A fuller description, including psychometric properties, of the measures used in this study is needed. Without such information the rationale for why they were chosen and the appropriateness of their use cannot be evaluated.</li> <li>Expatriate women comprised a substantial portion of the sample. Potential cultural differences between these women and native Saudi women could impact their experience of DV, their self-report, amount of education, income, substance use, etc. This could result in differences between the groups, making it inappropriate to combine them without proof that no significant differences exist. More information about the expatriate women's nation(s) of origin is needed, as well as an explanation as to how the author determined it</li> </ol>

was appropriate to combine them with native Saudi women for the analyses. \*It is not sufficient to state that the groups of women were combined due to experiencing the same amount of threat. Among other variables, threat can differ depending on many background variables that may be differentially relevant to this sample of women. An empirical way to validate the appropriateness of combining expatriate and native women would be to analyze whether they differed significantly on their self-reported variables of interest (Chi-square tests and t-tests). For instance, if the two groups of women do not differ significantly on the amount of self-reported victimization, educational status, age, socioeconomic status, and alcohol consumption, a case can be made for combining the samples. Otherwise, making conclusions that generalize across these groups is questionable at best. \*

- 3. The author explains that some women needed assistance in completing their questionnaires. Due to the sensitive nature of the information obtained, the potential impact on the self-report of those women who were helped should be considered in the discussion of study limitations. \*The author restated this sentence without stating how future studies could improve upon this limitation or the implications of this limitation on the present study. This is customary for a complete Discussion and, otherwise, assumes the audience understands why it is a relevant consideration. \*
- 4. The cross-sectional nature of this study should be discussed as a limitation as it prohibits conclusions about causality, predictive ability, and labeling variables as "risk" factors. \*The author copied this statement verbatim. If the author does not think this is a worthwhile inclusion, it is acceptable for her/him to provide an explanation as to why. Otherwise, an effort to discuss how future studies could improve upon this limitation or the implications of this limitation on the present study should be included. \*

### **VERSION 2 – AUTHOR RESPONSE**

Answers to the Reviewers : Gregory L. Stuart, Ph.D. & Jeniimarie Febres, M.A.

- 1. Cronbach a coefficient was used to evaluate domestic violence against women. The analysis of the measures used were included in the discussion. Thank you
- 2. Thank you for this remark. In fact, I found that of the expatriate women, 345 (15%) were Yemenis, 126 (5.5%) were Palestinians, 65 (2.8%) were Egyptians, 30 (1.3%) were Somalis, 118 (5.1%) were from African countries, and 256 (11.1%) were from neighboring countries. In total, 1908 women (82.9%) were Arabs. Regarding their religious inclinations, 2235 women (97.1%) were Muslims, while 23 (1.0%) were Christians; 43 women did not specify their religion. Given that most women were Arabs and a vast majority were Muslims, and they therefore had similar cultural backgrounds and practiced the same religion, I thought it was appropriate to combine Saudi and expat women. In addition, after performing further analysis, I found that there were no significant differences between the groups based on their nationality (p = 0.689.).

- 3. I apologize for this oversight and thank you for bringing this point to my attention. I have included the implications of this limitation of the current study.
- 4. I am also sorry I omitted to state how future studies could improve upon this limitation. I have included this in the manuscript.

Thank you for your insightful comments.